

LESSON PLAN

NAME OF FACULTY : RAJESH KUMAR
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 1ST
 SUBJECT : **ARCHITECTURAL DRAWING-I**
 LESSON PLAN DURATION : 15 WEEKS
 WORKLOAD PER WEEK : 08

WEEK	PRACTICAL	
	LECTURED AY	TOPIC
1 ST	1	Introduction and relevance Need and Importance of the architectural drawing, Basics of drafting instruments
	2	Basics of stationery (Pencils, sharpening, types of sheets, erasers, cutter etc.) , Demonstration by the teacher on holding pencils, fixing parallel bar and handling other tools and equipment used in Architectural Drawing Basic line work, with different pencil thickness Intensities H, HB, 2B, 4B, 6B
2 ND	3	Line Work: Horizontal lines, Vertical lines, Grid Line
	4	Diagonal lines , Composition, Pattern making in line work
3 RD	5	Lettering, Lettering Using different shades, Using different pencils & pens, stencils, Different styles, heights & intensities
	6	Introduction to Scale, Use of the modular scale, Metric system and FPS
4 TH	7	Geometric Shapes (Plan, elevation etc), Simple geometric (cubes, cylinder, cone etc), Complex (fusion of the basic shapes), Inc orporating the use of scale both feet & metric
	8	Orthographic Projections, Orthographic Projections & planes
5 TH	9	Dimensioning and its elements, methods, and arrangement of symbols for shape indication.
	10	SESSIONAL-I
	11	Introduction to Planes, Projection of Points.

6 TH	12	Projectionsof lines
7 TH	13	Projectionof solids,
	14	Sectionof Solids, Simple geometrical shapes
8 TH	15	Elementary building sections, Highlighting line, Intensities for sectional components, Elevational components for exp Parapet and Chajja
	16	Development of surface, Development with an aim to calculate areas
9 TH	17	SESSIONAL-II
	18	Isometric Views (30° – 30°)
10 th	19	Isometric Views (30° – 60°)
	20	2D Geometrical shapes
11 th	21	2D Geometrical shapes
	22	Conversion of 2D geometrical shapes into 3D isometric views, Conversion of 2D geometrical shapes into 3D isometric views
12 th	23	3D isometric views
	24	Complex solid to basic building forms
13 th	25	Axonometric Views, 2D Geometrical shapes
	26	Conversion of 2D Geometrical shapes
14 th	27	3D Axonometric views, Different angles (45° – 45°)
	28	Simple to complex solid to basic building forms, Isometric/axonometric use of any building form
15 th	29	Base plan, Exterior components, Interior components
	30	Exterior/interior components (with roads, landscape elements)
16 th	31	SESSIONAL-III

LESSONPLAN

NAME OF THE FACULTY : PARDIP K MITTAL
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 1st
 SUBJECT : **SKETCHING & MODEL MAKING**
 LESSON PLAN DURATION : 15 WEEKS
 WORKLOAD PER WEEK : 08

WEEK	PRACTICAL	
	LECTURE DAY	TOPIC
1 st	1	Free-hand of different types of lines Horizontal lines Vertical lines
	2	Exercises of different types of lines: Diagonal lines, Grid lines
2 nd	3	Freehand sketching: Two-dimensional geometrical figures Three-dimensional geometrical figures
	4	3D dimensional geometrical objects, Geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres, Cylinders etc.)
3 rd	5	Introduction to anthropometrics, Study of anthropometrics
	6	Freehand sketching of human figures, Trees, Furniture vehicles (One indoors exercise and one outdoors exercise), Vehicles
4 th	7	Freehand sketching of small buildings with shade and shadow trees, Human figures, sky, clouds and birds,
5 th	8	SESSIONAL-I
	9	Free hand sketching landscape elements, Using various mediums like pencil, ink and colours (water colours and pencil color etc.), Freehand sketches of Railway-station Freehand sketches of Railway-station
6 th	10	Freehand sketches of parking places
	11	Freehand sketches of Bus stand,
	12	Freehand sketches of market scene,
	13	Freehand sketches of village scene
7 th	14	Introduction of model making materials, techniques, Demonstration of model making materials, technique techniques
	15	Block models of basic geometrical forms, Prisms, Pyramids, Cubes, Cylinders
8 th	16	Using the following materials: Handmade sheet ivory sheet Thermocole
	17	Using the following materials: Mount Board/Sun Board/Balsa Wood Strips
	18	Composition of various geometrical shapes, different materials

9 th	19	SESSIONAL-II
	20	SculptureMaking Thermocole(Styropor)
10 th	21	MountBoard/sunboard/ Balsawoodstrips
	22	Claymodeling
11 th	23	Makingmodel/Sculpturematerialssuchascopperwire,ceramicsmisc.materialslikeleather
	24	BrickMasonry, Layingofbricksindifferentbonds
12 th	25	PaintingandPolishing
	26	Introductiontopaintingtools,equipment
13 th	27	Preparationofdifferentcolors
	28	Surfacepreparationbeforepainting(steel),
14 th	29	PaintingSteelItems
	30	Spray Paintingmetalitems
15 th	31	Surfacepreparationbeforepainting(wood),Paintingwooden,SprayPaintingwooden
	32	Surfacepreparationbeforepolishing(wood)SprayPaintingwooden
16 th	33	SESSIONAL-III

LESSONPLAN

NAME OF THE FACULTY : SH. RAJESH KUMAR
 DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 3rd
 SUBJECT : BASIC DESIGN AND VISUAL ARTS
 LESSION PLAN DURATION : 15 WEEKS
 WORK LOAD PER WEEK : 08 (P)

Week	Practical	
	Lecture Day	Topic
1 ST	1	Basic elements of Anthropometrics with respect to average measurements of human body of adult in different postures-its proportion and graphic representation.
	2	Basic elements of Anthropometrics with respect to average measurements of human body of children in different postures-its proportion and graphic representation.
2 ND	3	Human body (Anthropometrics), Various activities of human body , Proportion of Components of Human Body , The proportions of the different components of the human body; Examples from Le Corbusier Modular Man , VastuPursha Mandala.
	4	Human Activities : Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions. Activity space analysis related to form, function and expression of individual spaces like Bed room , Drawing room
	5	Human Activities : Basic human functions and their implications for spatial planning. Minimum and optimum areas for various functions. Activity space analysis related to form, function and expression of individual spaces like Kitchen, Bath room etc .
	6	Furniture standards (sizes of domestic and public furniture); Toilet - sizes and standards;
4 TH	7	Furniture standards (sizes of domestic and public furniture); Kitchen equipment - sizes and standards;
	8	windows - sizes, standards and locations.
5 TH	9	SESSIONAL Ist
	10	Doors - sizes, standards and locations.
6 TH	11	Standard Parking l a y o u t s s h o w i n g t u r n i n g r a d i i for two-wheelers. Parking layouts at various angles (parallel, 45 degrees, 90 degrees), Standard road width.
	12	Standard Parking l a y o u t s s h o w i n g t u r n i n g r a d i i for cars, buses, etc. Parking layouts at various angles (parallel, 45 degrees, 90 degrees), Standard road width.
7 TH	13	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.
	14	
8 TH	15	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.
	16	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot

		paths, public walkways, railing etc.
9TH	17	Street furniture : Standards for drinking fountains, waiting queues at bus stops, garden seats, waste bins, telephone booths, street lights, foot paths, public walkways, railing etc.
	18	Graphic Representation of plant material (ground cover, foliage, shrubs, trees).
10TH	19	Graphic Representation of plant material (human figures and vehicles).
	20	SESSIONAL-II
11TH	21	Introduction to AutoCAD (Latest version or AutoCAD2007) Input devices• Graphics• Starting AutoCAD• Inside the drawing editor• Commands in the menus (Tool bars)•Accessing Commands• Entity selection• Entering coordinate•
	22	• Accessing Commands• Entity selection• Entering coordinate• Folders for organizing drawings and files Exercise: Creating folders and sub folders
12TH	23	Creating and Saving a new Drawing Commands and options to create new drawings• Units• Limits• Snap• Grid• Ortho• Layer
	24	Application of layers• Open a new, existing drawing• Save, save as, quit, close, exit•
13TH	25	Customization of tool bars• Exercise: Setting up a new drawing with units, limits etc .
	26	Draw Commands Line• Poly line/Multi line. • Arc• Ellipse• Polygon• Rectangle• SP line• Circle• Sketch. • Hatch• Donuts•
14TH	27	Modifying an Existing Drawing Commands Undo Redo/Oops• Trim• Move•
	28	Offset• Rotate• Array• Stretch• Divide•Champher• Erase• Break• Copy, multiple copy• Mirror (Mirror test)•
15TH	29	Change (change properties)• Extend• Explode• Blip mode• Scale• Fillet• Design center.
	30	SESSIONAL III

LESSONPLAN

NAME OF THE FACULTY : RAJESH KUMAR
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 3rd
 SUBJECT : BMC-II
 LESSON PLAN DURATION : 15
 WEEKS WORK LOAD PER WEEK : 02TH + 04P

Week	Practical	
	Lecture Day	Topic
1 ST	1	Lime & Cement - Uses and classification of lime Setting action of fat lime and hydraulic lime and Storing of lime
	2	Joinery (1 sheets) • Doors and windows frames – their fixing
2 ND	3	Types of cement, their properties and uses
	4	Joinery (1 sheets) • Doors and windows frames – their fixing
3 ND	5	Composition of portland cement Setting and hardening of cement and storage of cement
	6	Joinery - Doors and windows frames – their fixing
4 TH	7	Aggregates & Mortar -Types and uses of Coarse Aggregates and Fine Aggregates Different types of sand and other Puzzolona material
	8	Panel Door, Flush Door (1 sheets)
5 TH	9	Functions, uses of Mortar and its proportion for different building works Preparation of cement mortar, lime mortar, lime cement mortar and their uses.
	10	SESSIONAL TEST-I
6 TH	11	Concrete - Definition of concrete, workability of concrete, Water - Cement Ratio
	12	Panel Door, Flush Door (1 sheets)
7 TH	13	Compaction and Curing of concrete Properties & necessity of Reinforced cement concrete (RCC), M15, and M20
	14	
		Casement & Pivot Windows (1 sheets)
8 TH	15	Timber - Characteristics and uses of common Indian timbers i.e. Sal, Deodar, Kali, Tali, Chir, and Teak etc. Characteristics of hard wood and soft wood.

	16	Casement & Pivot Windows (1 sheets)
9 TH	17	Characteristics of good timber and Defects in timber. Different methods of seasoning and preservation / preservative materials of timber.
	18	Building hardware (sizes, applications) (1sheet) • Tower bolts • Hinges including concealed hinges • Door Handles • Door springs • Latches • Floor door stopper/floor springs and magnetic types stoppers • Fan light pivots •Mortice lock • Door closer – including hydraulic types • Ventilator chains • Wire gauze • Magnetic cupboard closers
10 TH	19	Types of doors Types of windows
	20	SESSIONSL TEST-II
11 TH	21	Types, thickness, uses, Availability and sizes of: ••••• Sheet glass Wired glass Laminated safety glass
	22	Plastering and pointing (1 Sheet)
12 TH	23	Plate glass Insulating glass
	24	False Ceiling, Paneling and Fibrous Board Finishes (1 Sheets)
13 TH	25	Tinted glass • Heat absorbing glass. Glass blocks
	26	False Ceiling, Paneling and Fibrous Board Finishes (1Sheets)
14 TH	27	Toughened glass • Structural glazing • Etched glass
	28	Market survey/collection of catalogues for study purpose.
15 TH	29	Stained glass • Mirrors
	30	SESSIONAL TEST-III

LESSONPLAN

NAME OF THE FACULTY : GURDEEP MALIK
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 3rd
 SUBJECT : **HOA-I**
 LESSON : 15 WEEKS
 WORKLOAD PER WEEK : 04

Week	Theory	
	Lecture Day	Topic
1 st	1	Introduction to HISTORY OF ARCHITECTURE
	2	Importance of history to understand the Architecture
	3	Examples of Early shelters, Stone Age, Tumuli, etc. as an expression of man's physical and spiritual needs.
	4	Examples of Early shelters, Stone Age, Tumuli, etc. as an expression of man's physical and spiritual needs.
2 nd	5	Determinants of built form – geophysical, societal, technological etc.
	6	(Early caves, timber huts, stone houses etc).
	7	Western Civilization
	8	Egyptian Civilization Concept of the Royal Necropolis
3 rd	9	Locational context and architectural characteristics of public buildings
	10	e.g. Mastabas (master of Sakara) and pyramids (rock-cut and structural) – one example of each type to be chosen
	11	Mesopotamian Civilization
	12	
4 th	13	The urban context and architecture of public buildings (Ziggurats) – one example.
	14	Greek and Roman Civilizations
	15	Greek Civilization, Location and characteristics of typical civic spaces such as Agora, Acropolis, Stoa.
	16	Significant characteristics of Greek Architecture such as Materials, construction systems

5 th	17	System of proportioning, Greek orders, architecture of Greek temples – Parthenon, Athens.
	18	Roman Civilization - Significant characteristics of Roman Architecture.
	19	SESSIONAL TEST-1
	20	Concept of monumentality, materials and construction systems,
6 th	21	Roman orders, Colosseum
	22	Pantheon, Rome, their form, and constructional/structural systems.
	23	Indian Civilization and Buddhist Architecture in India
	24	
7 th	25	Indus Valley Civilization: Form of the Harappan city,
	26	location and role of public buildings.
	27	Architecture of the typical (Harappan dwelling)
	28	
8 th	29	Great Granary and Great Bath.
	30	The Vedic Village,
	31	Building typology and construction.
	32	Buddhist Architecture in India Building typology
9 th	33	Stupas
	34	Chaitya Hall
	35	Vihara one example from each; construction methods and ornamentation
	36	Temple Architecture in India
10 th	37	Evolution of temple and its various parts.
	38	Dravidian style (Southern)
	39	SESSIONAL TEST-2
	40	Dravidian style (Southern)
11 TH	41	General characteristics,
	42	Construction methods and material

	43	Construction methods and material
	44	(e.g. shore temple at Mahabalipuram,)
12 th	45	architectural form, planning components, construction methods, materials, motifs
	46	Indo Aryan Temple (North Indian)
	47	Sun Temple Konark;
	48	Architectural form,
13 th	49	Planning components, construction methods, materials, motifs
	50	Lingaraja Temple at Bhubaneswar
	51	Architectural form, planning components,
	52	Construction methods, materials, motifs
14 th	53	Kandariya Mahadeo at Khajuraho
	54	architectural form, planning components,
	55	Construction methods, materials, motifs
	56	Jain temples in India
15 th	57	Dilwara temple, Mt. Abu
	58	Architectural form, planning components,
	59	Construction methods, materials, motifs
16 th	60	SESSIONAL TEST-3

LESSON PLAN

NAME OF THE FACULTY : SUNIL RAI
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 3rd
 SUBJECT : **CLIMATOLOGY**
 LESSON PLAN DURATION : 15 WEEKS
 WORK LOAD PER WEEK : 03

WEEK	LECTURE DAY	THEORY
		TOPIC
1 ST	1.	General Introduction : Introduction to climatology
	2.	Movement of earth around sun,
	3.	Elements of climate (Wind, temp, humidity,).
2 ND	4.	Elements of climate (precipitation, pressure).
	5.	Different Climatic Zones.
	6.	Orientation of building with respect to above mentioned elements of climate
3 RD	7.	Effect of climate on man and shelter.
	8.	Relation of Climate and comfort: Macro-micro climatic effects
	9.	Difference between Climate and comfort
4 TH	10.	Difference between Macro-micro climatic effects
	11.	Concept of comfort zone and bio-climatic chart
	12.	Concept of comfort zone and bio-climatic chart
5 TH	13.	Climatic evaluation by season
	14.	Climatic evaluation by season
	15.	IST SESSIONAL TEST
6 TH	16.	Sun Control and shading devices (without calculations)
	17.	Solar Chart (sun path diagram)
	18.	Orientation for sun

7 TH	19.	Internal and external sun protection devices
	20.	Internal and external sun protection devices
	21.	Natural lighting
8 TH	22.	Introduction of Solar Passive Design
	23.	Objectives of Solar Passive Design
	24.	Passive solar heating and cooling
9 TH	25.	Wind control: Orientation with respect to wind
	26.	Orientation with respect to wind
	27.	Wind protection devices
10 ^T H	28.	Use of building materials with respect to climate: Concrete, Brick, Glass
	29.	Use of building materials with respect to climate: Plastics, Stone, Insulating material
	30.	2ND SESSIONAL TEST
11 ^T H	31.	Environment and Ecology:
	32.	Environment and Ecology
	33.	Basic elements of ecology
12 ^T H	34.	Concepts of natural cycles in Eco-system
	35.	Source of noise and air pollution
	36.	Noise and air pollution effects
13 ^T H	37.	Noise and air pollution controls
	38.	Use of landscape elements
	39.	Use of landscape elements for micro and macro climate control
14 ^T H	40.	Use of landscape elements for micro and macro climate control
	41.	Introduction to climate change

	42.	Principle causes of climate change
15 ^T H	43.	Climate change: effects- methods of mitigating climate change
	44.	Climate change: effects- methods of mitigating climate change
	45.	3RD SESSIONAL TEST

LESSONPLAN

NAME OF THE FACULTY

: GURDEEP

DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 3rd
 SUBJECT : **ARCHITECTURE DRAWING –III**
 LESSON PLAN DURATION : 15
 WEEKS WORKLOAD PER WEEK : 04

WEEK	PRACTICAL TOPIC
1 ST	Basic of Perspective: Introduction to basic terminology (picture plane. Vanishing point, Station point, cone of vision etc) Introduction to types of perspective - (One-point, Two-point, Bird's eye view, worm's eye view, normal eye view etc.) (vanishing point method)
2 ND	Drawing of Two-Point Perceptive Views: Geometrical shapes incorporating all views: planes, cones, cubes, cylinders, pyramid etc. Bird's eye view, Normal eye view, Worm's eye view
3 RD	Geometrical shapes incorporating all views: planes, cones, cubes, cylinders, pyramid etc. Bird's eye view, Normal eye view, Worm's eye view
4 TH	Two-point perspective of simple buildings such as Guardroom, kiosk etc
5 TH	1ST SESSIONAL TEST
6 TH	Two-point perspective of simple buildings such as Guardroom, kiosk etc
7 TH	Drawing of One-Point Perceptive Views: Geometrical shapes incorporating all views: planes, cones, cubes, cylinders, pyramid etc.
8 TH	One-point perspective of a given plan of kitchen and drawing room.
9 TH	Introduction to Sciography-in Plans and Elevation. Geometrical shapes such as: planes, cones, cubes, cylinders, pyramid etc.
10 TH	2ND SESSIONAL TEST
11 TH	Geometrical shapes such as: planes, cones, cubes, cylinders, pyramid etc.
12 TH	Sciography of simple buildings such as Guardroom, kiosk etc.
13 TH	Introduction to Rendering: Demo from teacher in different mediums - colour pencils, crayon, Colour wash. Markers etc.
14 TH	Rendering Techniques in pen and ink, Different colour mediums.
15 TH	Rendering of a given perspective
16 TH	3RD SESSIONAL TEST

LESSON PLAN

NAME OF THE FACULTY : GURDEEP MALIK
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 3rd
 SUBJECT : BUILDING SERVICES
 LESSON PLAN DURATION : 15
 WEEKS WORKLOAD PER WEEK : 03(L)

Week	THEORY	
	LECTURE Day	Topic
1 ST	1	Water Supply-Water as a natural resource, public health significance of water quality, demand of water for domestic, commercial, industrial and public utility purposes as per BIS standards.
	2	Per capita demand, leakage and wastage of water and its preventive measures
2 nd	3	System of water supply – continuous, intermittent, their advantages and disadvantages, Storage and Distribution of Water: Different methods of water distribution boosting water, gravity and pressure distribution by storage tanks of individual buildings
	4	Hot water supply for buildings including solar water heating, Service connections, types and sizes of pipes, water supply fixture and installations, Concept of Rainwater harvesting.
3 rd	5	Drainage-Principles of drainage, surface drainage; combined and separate system of drainage, shape and sizes of drains and sewers, storm water overflow chambers, methods of laying and construction of sewers
	6	House drainage: traps – shapes, sizes, types, materials and function, Inspection chambers – sizes, and construction
4 th	7	Ventilation of house drainage – anti-siphonage and vent pipes, single stack and double stack system,
	8	Functions and working of sinks, wash basins, water closets, flushing cisterns, urinals, – sizes and types, Septic tanks, seepage and soak pits
5 th	9	Simple exercises on layout plans for toilet and kitchens for public and residential buildings including the placement, distances and fixing details
	10	SESSIONAL TEST-I
6 th	11	Lighting and Electrical Fittings-Electrical distribution-conduits for wiring
	12	Types of wiring, types of switches, various terms used in lighting-illumination, Lux, lumen etc. distribution panels

7th	13	MCB'S,ELCBS,Methodsoflighting,qualityoflightofmercurylamps,incandescenttype sof lamps, fluorescenttubes
	14	CFLandotherlamps,thumbrulesfor calculationofilluminatinglevel,varioussystemsofwiring andtheirsustainability
8TH	15	Symbolic representation of electrical fittings for different work areas inresidentialbuilding(e.g.bedroom,livingroom,kitchen,studyandtoilet)
	16	Preparationofelectricallayoutofasimpleresidentialbuilding,Precautionstoavoidelectricala ccidents
9th	17	Heat,VentilationandAirConditioning(HVAC)-Behaviorofheatpropagation
	18	Thermalinsulatingmaterialsandtheirco-efficientofthermalconductivity
10th	19	Generalmethodsofthermalinsulation
	20	SESSIONAL- II
11th	21	Thermalinsulationofroofs,exposedwalls,Ventilation
	22	Definitionandnecessity,Systemofventilation(Mechanical)
12th	23	Essentialsofair-conditioningsystem,FireFightingServices-Causesoffire inBuildings
	24	Classificationofbuildingmaterialsaccordingtofirerating;firealarmsystems
13th	25	Introductiontofire-fightingsystem,precautionandcontrollingdevices(fire panels,doorandwindowsautomation,firehydrantsandsprinklers)
	26	Fireescapeelements(staircases,ramps,),provisionsinbuildingfromfiresafetyangle as perBIS
14th	27	heatdetectors,andfiredetectionsystem
	28	VerticalTransportationSystems-Classificationandtypesoflifts
15th	29	liftsizes,provisionandinstallation,escalators, sizes,safetynormstobeadopted
	30	SESSIONAL-III

LESSONPLAN

NAME OF THE FACULTY : SUNIL RAI
 DISIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 5th
 SUBJECT : ARCHITECTURAL DESIGN
 LESSION PLAN DURATION : 15 WEEKS
 WORK LOAD PER WEEK : 08

Week	Practical	
	Practical Day	Topic
1st	1	Introduction about design, Introduction about Small Housing Complex, Framing of Requirement, Inter- relation of various spaces and circulation pattern.
	2	Site visit to Health centre to studying the planning, inter relation of space and various areas, circulation pattern, Landscaping, Lighting / Vent. And other features
2nd	3	Report working of the Health Centre visit with sketches
	4	Discussion and viva voce of report
3rd	5	Preliminary design started with concept plan
	6	Discussion and finalization of rough plan
4th	7	Preliminary of G.F plan & Site plan
	8	Completion of all floor plans with furniture layout & rendering, Elevation section and view
5th	9	SESSIONAL TEST-1
	10	Completion of set of plans, elevations, view with full rendering
6TH	11	Viva- Voce and checking of Health Centre Project
	12	Viva- Voce and checking of Health Centre Project
7TH	13	Site Visit to Shopping Complex
	14	Test of Shopping Complex
8TH	15	Test of continued
	16	Viva- Voce of Shopping Complex Drawings

9TH	17	Introduction about nursery school project framing of requirements, inter- relation of spaces and circulation pattern.
	18	Site visit to nursery school to study the planning, inter relationship of spaces, various areas, circulation pattern, landscape designing , furniture detailing, light, ventilation etc.
10TH	19	Report marking of Nursery school visited in previous week. Discussion and finalization of rough plan
	20	SESSIONAL TEST-2
11TH	21	Preliminary design started with conceptual plan.
	22	Discussion and finalization of rough plan.
12TH	23	Preparation of ground floor plan, site plan.
	24	Completion of plans with furniture layout and rendering
13TH	25	Preparation of elevation, sections and view.
	26	Completion of set of all nursery school drawings with full rendering.
14TH	27	Viva- Voce Exam
	28	Viva- Voce and checking of Drawings
15TH	29	Completion of all pending works / drawings
	30	SESSIONAL TEST-3

LESSONPLAN

NAME OF THE FACULTY : SURBHI
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 5th
 SUBJECT : **BUILDING MATERIALS & CONSTRUCTION-IV**
 LESSON PLAN DURATION : 15
 WEEKS WORKLOAD PER WEEK : 02T + 04P

WEEK	LECTURED AY	PRACTICAL TOPIC
1st	1.	Ceiling Materials (Size, quality, availability, types of finishes, uses, trade names, market rate and application methods) Hession cloth, Gypsum plaster boards plaster of Paris board
	2.	Ceiling Materials Plain AC sheets – E board
2nd	3.	Ceiling Materials Plywood, Hard Board, Cellotex
	4.	Ceiling Materials Fiber Boards • Fiber glass • Asbestos tiles • Thermocoal • Medium density fiber board (MDF)
3rd	5.	Roofing Materials GI sheets, Shingle
	6.	Roofing Materials Ferro-cement sheets, Fiber sheets
4th	7.	Roofing Materials Slates, Mangalore tiles, Pan tiles, Corrugated PVC sheets
	8.	Roofing Materials Their standard sizes, uses, availability, prices and knowledge about supporting system
5th	9.	Additives and Admixtures Water repellants and water proofing agents
	10.	Additives and Admixtures Accelerators
	11.	1ST SESSIONAL TEST
6th	12.	Additives and Admixtures Air entraining agents, Hardeners
7th	13.	Additives and Admixtures Workability increasing agents
	14.	Additives and Admixtures Fly ash
8th	15.	Additives and Admixtures Their availability, uses, costs, performance specifications, and properties used under various conditions.

	16.	Kitchen and Toilet Fixtures Introduction
9th	17.	Market survey of various materials and collection of data with reference to their properties, sizes, costs, designs etc.
	18.	Specifications of kitchen and toilet fittings and fixtures, their popular brand names, shapes and sizes
10th	19.	Earthquake resistant building configuration
	20.	Principles of earthquake resistance, effect of building form on seismic behavior, building configuration for improved earthquake resistance
11th	21.	2ND SESSIONAL TEST
	22.	Steel Sections Steel doors and windows using standard rolled sections
12th	23.	Rolling and collapsible structure
	24.	Steel Roofs Line diagram of steel roofs for various span
13th	25.	Steel Roofs Construction details of steel roofs
	26.	Steel Roofs Roof covering: AC, GI sheets
14th	27.	Steel Roofs North light truss
	28.	Frame and Sealed Connections Built Up Steel Columns and Beams Beam to beam framed connection
15th	29.	Frame and Sealed Connections Built Up Steel Columns and Beams Beam to column framed connection
16 th	30.	Frame and Sealed Connections Built Up Steel Columns and Beams Beam to column seated connection
	31.	3RD SESSIONAL TEST

LESSON PLAN

NAME OF THE FACULTY : GURDEEP MALIK
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 5th
 SUBJECT : **ST. SYSTEM-I**
 LESSON PLAN DURATION : 15 WEEKS
 WORK LOAD PER WEEK : 03

WEEK	LECTURED AY	THEORY
		TOPIC
1 ST	1.	Force: Definition, effect, characteristics,
	2.	Force Systems: Coplanar and non-coplanar force systems
2 ND	3.	Types of coplanar Forces
	4.	Collinear, Concurrent, Parallel Forces
3 RD	5.	Non-concurrent and non-parallel forces
	6.	Resultant force and components of a force
4 TH	7.	Laws of forces: Parallelogram, Triangle and polygon Laws of forces
	8.	Definition of centre of Gravity and Centroid
5 TH	9.	Centroid by method of moments of areas for square, rectangular, triangular cross-section
	10.	IST SESSIONAL TEST
6 TH	11.	Centroid by method of moments of areas for L-shape, T shape and I shape cross-section
	12.	Moments of Inertia by methods of moments and Radius of Gyration.
7 TH	13.	Definition of stress and strain
	14.	Types of stress and strain

8th	15.	Stress strain curve for mild steel
	16.	Hook's Law (Theory) Elasticity, Elastic limit
9th	17.	Shear Force and Bending Moment
	18.	Types of loads- Dead load, Live load, snow, wind and seismic loads as per IS:875
10th	19.	Types of loading: Point load, uniformly distributed load and uniformly varying load.
	20.	2NDSESSIONALTEST
11th	21.	Types of Supports: Hinged, fixed supports, types of reactions provided by each type of support.
	22.	Types of Beams: Simply supported, cantilever, overhanging and continuous beams (description only)
12th	23.	Concept of bending moment and shear force.
	24.	Bending moment and shear force diagrams for simply supported beam subjected to point loads and uniformly distributed loads .
13th	25.	Bending moment and shear force diagrams for cantilever subjected to point loads and uniformly distributed loads .
	26.	Bending moment and shear force diagrams for overhanging beams subjected to point loads and uniformly distributed loads only.
14th	27.	Types of Structure Systems & its applications
	28.	Load-Bearing Structures ,Frame Structures
15th	29.	Cable and Tensile Structures , Hybrid Structure Systems
	30.	Shell Structures ,Truss Structures
16 TH	31.	3RDSESSIONALTEST

LESSON PLAN

NAME OF THE FACULTY : Sh. PARDIP KUMAR MITTAL
 DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
 SEMESTER : 5th
 SUBJECT : QUANTITY SURVEYING AND COSTING
 LESSON PLAN DURATION : 15
 WORK LOAD PER WEEK : 04

Week	Theory	
	Lecture Day	Topic
1 st	1 & 2	Introduction to quantity surveying and its importance.
	3 & 4	Duties of quantity surveyor
2nd	5 & 6	Types of estimates Preliminary estimates - Plinth area estimate
	7 & 8	Cubic rate estimate, Estimate per unit base
3rd	9 & 10	Detailed estimates Definition
	11 & 12	Stages of preparation – details of measurement and calculation of quantities and abstract
4th	13 & 14	Measurement Units of measurement for various items of work as per BIS:1200
	15 & 16	Sessional Test-1
5th	17 & 18	Rules for measurements
	19 & 20	Different methods of taking out quantities – centre line method
6th	21 & 22	Different methods of taking out quantities – short wall and long wall method
	23 & 24	Running and maintenance cost of construction equipment 7 Measurement Book and Billing, Entries in measurement book
7th	25 & 26	Standard measurement book
	27 & 28	Checking of measurement
8th	29 & 30	Preparation of bill
	31 & 32	First and final bill
9th	33 & 34	Sessional Test-2
	35 & 36	Running account bill
10th	37 & 28	Advance payment, secured advance payment
	39 & 40	Refund of security money
11th	41 & 12	Contractorship: Meaning of contract
	43 & 44	Contractorship: Qualities of a good contractor and their qualifications
12 th	45 & 46	Contractorship: Essentials of a contract
	47 & 48	Contractorship: Types of contracts, their advantages, dis-advantages and suitability, system of payment
13th	49 & 50	Contractorship: Single and two cover-bids; tender, tender forms and documents, tender notice,
	51 & 52	Submission of tender and deposit of earnest money
14th	53 & 54	Security deposit, retention money, maintenance period
	55 & 56	Preparation of Tender Document based on Common Schedule Rates (CSR)
15 th	57 & 58	Introduction to CSR and calculation of cost based on premium on CSR Specifications
	59 & 60	SESSIONAL TEST-3

LESSON PLAN

NAME OF FACULTY : GURDEEP MALIK
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5TH
SUBJECT : COMPUTER APPLICATIONS IN ARCHITECTURE - II
LESSON PLAN DURATION : 15 WEEKS
WORKLOAD (PERIODS PER WEEK) : 6

	<u>PRACTICAL</u>	
	PRACTICAL WEEK	<u>TOPIC</u>
	<u>1</u>	Preparation of working drawings using AutoCAD for the Minor Project work of 4th Semester
	<u>2</u>	Site Plan, Foundation layout plan & sectional details.
	<u>3</u>	Ground Floor Plan , Upper Floor Plans (one for each floor)
	<u>4</u>	Terrace Plan with rainwater drainage and disposal details
	<u>5</u>	SESSIONAL TEST-1
	<u>6</u>	Built-in furniture design: Plans, elevations, and sections of various fitting details
	<u>7</u>	Built-in furniture design: Plans, elevations, and sections of various fitting details
	<u>8</u>	Entrance gate, boundary wall, and railing details
	<u>9</u>	Entrance gate, boundary wall, and railing details

	<u>10</u>	SESSIONAL TEST-2
	<u>11</u>	Electrical layout plan
	<u>12</u>	Electrical layout plan
	<u>13</u>	Water supply, sewage & drainage layout plan.
	<u>14</u>	Water supply, sewage & drainage layout plan.
	<u>15</u>	SESSIONAL TEST-3

LESSONPLAN

NAME OF FACULTY : SURBHI
DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP
SEMESTER : 5th
SUBJECT : LANDSCAPE DESIGN (ELECTIVE-I)
LESSON PLAN DURATION : 15 WEEKS
WORKLOAD PER WEEK : 3 PERIODS

WEEK	THEORY	
	LECTURE DAY	TOPIC
1st	1	Elements of Landscape a) Plants (Trees, shrubs, ground covers, Flowering species, climbers)
	2	b) Water
	3	c) Earth forms
2nd	4	d) stones
	5	e) Artificial elements
	6	f) man-made elements
3rd	7	Explain of principles of landscape design
	8	Explain landscape design with respect to architectural functions
	9	Architectural functions a) Form
4th	10	b) Symmetry
	11	c) Balance
	12	d) Texture

5th	13	e) Colour
	14	f) Contrast
	15	SESSIONAL TEST-1
6th	16	g) Proportions
	17	h) scale
	18	i) Simplicity
7th	19	j) Focus
	20	k) Rhythm
	21	l) Aesthetics (Visual aspects)
8th	22	m) Aesthetics (functional aspects)
	23	Explain Relationship of landscape & climate
	24	Relationship of landscape & climate a) Orientation
9th	25	b) Sun Control by Plants
	26	c) Wind control by plants
	27	d) Microclimate Human comfort
10th	28	e) Human comfort
	29	Outdoor functional spaces
	30	SESSIONAL TEST-2
11th	31	Importance of outdoor functional spaces in landscape design
	32	Outdoor functional spaces with respect to different building types.
	33	Outdoor functional spaces with respect to different building types
12th	34	Outdoor functional spaces with respect to different building types

	35	Various types of gardens :- Japanese gardens,
	36	Mughal gardens
13th	37	Topiary gardens
	38	Importance of different types of gardens in landscape design
	39	Landscape design of an outdoor area within an existing building
14th	40	Landscape design of an outdoor area within an group of Buildings
	41	Landscape design of an outdoor area within an Park design
	42	Landscape design of the architectural design project students are currently working on.
15th	43	Work on architectural design project
	44	Representation of Landscape drawings
	45	SESSIONAL TEST-3